### U.S. Department of the Interior • U.S. Geological Survey

# MINERAL INDUSTRY SURVEYS

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### SODA ASH AND SODIUM SULFATE IN JUNE 1997

Natural soda ash production in June was 971,000 metric tons, 4% higher than the previous month's production, according to the U.S. Geological Survey. Ending inventories were estimated at 327,000 tons, a 16% increase from that of the preceding month. Wyoming trona production in June was 1,400,000 tons. Total production of chemical caustic soda as soda ash equivalent, based on data from all three producers, was 17,200 tons in June.

Apparent consumption of soda ash for May was 529,000 tons, 15% lower than the May 1996 level of 622,000 tons. Exports and imports of soda ash in May 1997 were 386,000 tons and 9,480 tons, respectively.

The cumulative soda ash statistics through May 1997,

compared with those of the corresponding period in 1996, were as follows: production 5% higher, imports 7% higher, exports 17% higher, ending stocks 8% higher, and apparent consumption 3% lower.

The first quarter end-use data are included in Table 6 of this report.

Abstracts from the 1st International Soda Ash Conference that was held in Rock Springs, WY, on June 10-12, 1997, are available on the soda ash home page on the U.S. Geological Survey's website. The site is: http://minerals.er.usgs.gov/minerals/pubs/commodity/soda\_ash

 ${\bf TABLE~1}\\ {\bf SALIENT~SODA~ASH~AND~NATURAL~SODIUM~SULFATE~STATISTICS~1/}$ 

	Soda ash (Thousand metric	tons)	Natural sodium (Metric ton	
	`	Ending	`	Ending
Period	Production 2/	stocks	Production	stocks
1996:				
June	885	284	26,400	14,700
July	850	296	21,500	12,300
August	847	264	24,100	15,700
September	857	223	26,000	16,400
October	909	290 3/	26,400	18,500
November	859	285	24,100	14,300
December	866	271	29,500	19,500
Total (JanJun.)	4,980	XX	154,000	XX
Total	10,200	XX	306,000	XX
1997:				
January	866	326 e/	24,800	15,700
February	766	275 e/	23,800	19,500
March	912	296 e/	27,400	22,100
April	834	251 e/	27,500	15,900
May	937	282 e/	27,500	17,800
June	971	327 e/	28,400	24,400
Total	5,290	XX	159,000	XX

e/ Estimated. XX Not applicable.

 ${\bf TABLE~2} \\ {\bf U.S.~EXPORTS~OF~SODA~ASH~AND~SODIUM~SULFATE~1/}$ 

### (Metric tons)

					Disodiur	n sulfate		
	Disodium carbonate		Saltcake		Other		Total	
Period	Quantity (thousand metric tons)	Value 2/ (thousands)	Quantity	Value 2/ (thousands)	Quantity	Value 2/ (thousands)	Quantity	Value 2/ (thousands)
1996:								
May	217	\$29,000	104	\$17	63	\$38	167	\$55
June	337	43,800	13,300	1,290	43	17	13,400	1,310
July	315	42,000	12,500	695	29	20	12,600	715
August	392	51,100	2,440	189	6,620	956	9,060	1,150
September	329	44,400	1,690	151	23	8	1,710	159
October	392	53,600	2,060	210	119	679	2,180	889
November	255	34,800	1,190	140	108	545	1,300	685
December	367	47,700	14,300	1,250	103	36	14,400	1,290
Total (JanMay)	1,450	191,000	28,400	2,190	2,760	761	31,100	2,950
Total	3,840	508,000	75,900	6,120	9,810	3,020	85,700	9,140
1997: 3/								
January	262	33,300	3,160	310	2,390	661	5,550	971
February	319	43,600	3,610	380	317	115	3,920	495
March	376	49,100	11,400	648	977	230	12,400	878
April	342	44,700	1,990	211	519	188	2,510	399
May	386	51,100	5,050	589	651	234	5,700	823
Total	1,690	222,000	25,200	2,140	4,850	1,430	30,100	3,570

<sup>1/</sup> Data are rounded to three significant digits; may not add to totals shown.

Source: Bureau of the Census, as adjusted by the U.S. Geological Survey, using Journal of Commerce trade data and information.

 $<sup>1/\,\</sup>mbox{Data}$  are rounded to three significant digits; may not add to totals shown.

<sup>2/</sup> Production data includes soda ash equivalent from soda liquors only. Soda ash equivalent from mine water is not included. Soda liquors for the current year 1997 are withheld to avoid disclosing company proprietary data.

<sup>3/</sup> Because of previously unreported inventory in remote locations by one producer, ending stocks are somewhat higher than the level of prior months.

<sup>2/</sup> Free alongside ship (f.a.s.) value at U.S. ports.

<sup>3/</sup> June 1997 data not available at time of publication.

## $\label{eq:table 3} \text{U.S. EXPORTS OF SODA ASH BY COUNTRY, } 1997 \ 1/$

(Metric tons)

						Total	% of
Country	January	February	March	April	May	quantity	total
Argentina	6,150	12,100	10,100		16,400	44,800	3
Australia				5,020	21,000	26,000	2
Belgium	6,000	8,270			16,600	30,900	2
Bolivia				900		900	
Brazil	17	21,100	38,100	17	33,100	92,300	5
Canada	26,200	28,500	22,500	21,500	20,900	120,000	7
Chile		20,000		21,800		41,800	2
China		9,010	27,500	5,000	15,600	57,100	3
Colombia	9,380		10,900		10,900	31,200	2
Costa Rica				4,070		4,070	
Croatia	12,000			11,000		23,000	1
Dominican Republic			1,770		18	1,790	
Ecuador			4,480			4,480	
France	10,000		22,200		18,200	50,400	3
Guatemala	41	2,120		3,010	24	5,190	
Indonesia	19,100	23,500	29,400	47,900	46,900	167,000	10
Ireland	589					589	
Israel	6,980			14,000	37	21,000	1
Jamaica	1,540					1,540	
Japan	20,100	40,500	34,500	55,300	12,500	163,000	10
Korea, Republic of	26,500	29,900	37,500	31,700	22,100	148,000	9
Malaysia	8,100	10,300		14,500	16,600	49,600	3
Mexico	29,300	32,500	43,100	24,800	24,300	154,000	9
New Zealand	60	6,790	477	106	318	7,750	
Panama		9				9	
Peru		3,900		5,300		9,200	1
Philippines	7,150	15,200	12,500		10,000	44,900	3
Russia			477			477	
Saudi Arabia	8,000		14,900	1,000	13,000	36,900	2
Singapore	·				5,000	5,000	
South Africa				25,100		25,100	1
Spain	9,600		12,900			22,500	1
Switzerland	·		21			21	
Taiwan	25,300	15,000	20,900	14,900	15,100	91,100	5
Thailand	23,400	24,500	25,500		50,300	124,000	7
Trinidad and Tobago			2,730			2,730	
Turkey	5,030					5,030	
United Arab Emirates				5,000		5,000	
United Kingdom	<u></u>			15,300	53	15,300	1
Venezuela	1,990	16,100	2,980	15,200	17,400	53,600	3
Total	262,000	319,000	376,000	342,000	386,000	1,690,000	100

<sup>1/</sup> Data are rounded to three significant digits; may not add to totals shown.

Source: Bureau of the Census.

 ${\bf TABLE~4} \\ {\bf U.S.~IMPORTS~OF~SODA~ASH~AND~SODIUM~SULFATE~1/}$ 

### (Metric tons)

			Disodium sulfate					
	Disodium carbonate		Saltcake 2/		Other		Total	
		Value 3/	Value 3/		Value 3/		Value 3	
Period	Quantity	(thousands)	Quantity	(thousands)	Quantity	(thousands)	Quantity	(thousands)
1996:								
May	8,440	\$1,130	13,700	\$1,330	1,690	\$184	15,400	\$1,510
June	8,770	1,200	14,400	1,400	2,250	342	16,600	1,750
July	8,630	1,180	9,940	987	3,800	405	13,700	1,390
August	8,310	1,140	11,700	1,110	2,940	270	14,600	1,380
September	10,500	1,440	14,400	1,400	1,550	193	15,900	1,590
October	9,340	1,260	12,200	1,200	1,300	163	13,500	1,360
November	10,000	1,380	11,600	1,120	1,460	173	13,000	1,300
December	9,450	1,290	12,800	1,320	2,270	292	15,100	1,610
Total (JanApr.)	33,500	4,720	46,900	4,220	12,200	961	59,100	5,190
Total	107,000	14,700	148,000	14,100	29,400	2,980	177,000	17,100
1997: 4/								
January	8,930	1,180	10,700	1,060	2,620	294	13,300	1,350
February	9,280	1,330	14,200	1,400	2,050	266	16,300	1,660
March	8,760	1,240	12,400	1,250	1,170	222	13,600	1,470
April	8,500	1,160	10,700	1,040	786	121	11,500	1,160
May	9,480	1,220	11,000	1,100	943	138	11,900	1,240
Total	45,000	6,140	59,000	5,840	7,580	1,040	66,600	6,880

<sup>1/</sup> Data are rounded to three significant digits; may not add to totals shown.

Source: Bureau of the Census.

 ${\bf TABLE~5} \\ {\bf U.~S.~APPARENT~CONSUMPTION~OF~SODA~ASH~1/}$ 

### (Metric tons)

				Net stock	k	Apparent
Period	Production	Imports	Exports	Increase or	Decrease	consumption 2/
1996:		_				-
May	876,000	8,440	217,000	45,000		622,000
June	885,000	8,770	337,000	24,000		532,000
July	850,000	8,630	315,000	12,000		531,000
August	847,000	8,310	392,000		32,000	495,000
September	857,000	10,500	329,000		41,000	580,000
October	909,000	9,340	392,000	67,000		460,000
November	859,000	10,000	255,000		5,000	619,000
December	866,000	9,450	367,000		14,000	522,000
Total (JanMay)	4,100,000	41,900	1,450,000		46,000	2,730,000
Total	10,200,000	107,000	3,840,000		35,000	6,470,000
1997:						
January	866,000	8,930	262,000	55,000 e/		557,000
February	766,000	9,280	319,000		51,000 e/	507,000
March	912,000	8,760	376,000	21,000 e/		524,000
April	834,000	8,500	342,000		45,000 e/	545,000
May	937,000	9,480	386,000	31,000 e/		529,000
June	971,000	NA	NA	45,000 e/		NA
Total (Jan-May)	4,310,000	45,000	1,690,000	31,000 e/		2,660,000

e/Estimated. NA Not available.

<sup>2/</sup> Includes Glauber's salt.

<sup>3/</sup> Customs, insurance, and freight (c.i.f) value at U.S. ports.

<sup>4/</sup> June 1997 data not available at time of publication.

 $<sup>1/\,\</sup>textsc{Data}$  are rounded to three significant digits; may not add to totals shown.

<sup>2/</sup> Production plus imports minus exports plus or minus stock changes.

# ${\it TABLE~6}$ REPORTED CONSUMPTION OF SODA ASH IN THE UNITED STATES, BY END USE, BY QUARTERS 1/

#### (Metric tons)

		1996		1997
SIC		First		First
Code	End use	quarter	Total	quarter
32	Glass:			
3221	Container	372,000	1,550,000	378,000
3211	Flat	218,000	1,010,000	239,000
3296	Fiber	59,500	236,000	61,200
3229	Other	66,100	247,000	62,600
	Total	716,000	3,040,000	741,000
281	Chemicals	385,000	1,690,000	414,000
284	Soaps and detergents	204,000	785,000	191,000
26	Pulp and paper	49,900	183,000	33,700
2899	Water treatment 2/	19,000	86,500	20,300
	Fluegas desulfurization	36,100	152,000	30,600
	Distributors	77,600	314,000	85,800
	Other	35,700	145,000	50,900
	Imports 3/	25,000	107,000	27,000
	Total domestic			_
	consumption	1,520,000	6,390,000	1,570,000
	Exports 4/	903,000	3,930,000	975,000
	Canada	52,500	226,000	70,200
	Total industry sales 5/	2,430,000	10,300,000	2,540,000
	Total sales from plants	2,320,000	10,100,000	2,510,000
	Total production	2,370,000	10,200,000	2,540,000

<sup>1/</sup> Data are rounded to three significant digits; may not add to totals shown.

<sup>2/</sup> Includes soda ash equivalent from soda liquors and purge liquors sold to powerplant for water treatment. Sales of mine water are excluded.

<sup>3/</sup> Data are from the Bureau of the Census and may vary from the quantity reported by the producer/importer. Actual imports are proprietary data but have been distributed into appropriate end-use categories and included in "Total Domestic Consumption."

<sup>4/</sup> As reported by producers. Includes Canada. Data may not necessarily agree with that reported by the Bureau of the Census for the same periods.

<sup>5/</sup> Represents soda ash from domestic origin (production and inventory changes) and imports and for exports. Includes soda ash sold by coproducers and distributed by purchasers into appropriate end-use categories.